



CERES Processing Level Details

- The CERES data products are written in HDF format (Information on HDF) and netCDF format. (Information on netCDF)
- Processing Level Detail Definitions
- Processing Scheme Detail Definitions

Available Processing Level Data Sets

| Processing | Processing | CERES | Data Averaging Information | | Data File Information | |
|------------|--------------------------|---|-----------------------------|--|---|--|
| Level | Scheme | Data Product | Temporal Resolution | Spatial Resolution | File Frequency | Approx File Size ¹ |
| Level 3B | TOA Flux | EBAF: Energy Balanced and Filled | monthly and climatology | 1° gridded regional, 1° zonally averaged, globally averaged, | 1/dataset | 208 |
| | Clouds and Computed Flux | ZAVG Monthly Zonal and Global Radiative Fluxes and Clouds | monthly monthly 3-hourly | 1° zonally averaged, globally averaged | 1/month | 4 |
| | | AVG Monthly Regional Radiative and Clouds | monthly monthly 3-hourly | 1° gridded regional | 1/month | 630 |
| | | SYN Synoptic Radiative Fluxes and Clouds | 3-hourly | 1° gridded regional | 1/day | 256 |
| | | FSW Gridded Radiative Fluxes and Clouds | instantaneous | 1° gridded regional | 60 zonal files/month (3 zones/file) | 100 |
| Level 3 | Clouds and TOA/SFC Flux | SRBAVG TOA/Surface Averages | monthly, monthly hourly | 1° gridded regional, 1° zonally averaged globally averaged | 3 files/month | SRBAVG1: 245 SRBAVG2: 500 SRBAVG3: 515 |
| | | SFC Gridded TOA/Surface Fluxes and Clouds | instantaneous | 1° gridded regional | 36 zonal files/month (5 zones/file) | 60 |

| | Clouds | ISCCP-D2like Monthly Cloud Averages | monthly 3-hourly | 1° gridded regional | 3 files/month | -MRG: -GEO: 33 -Day: 671 -Nit: 671 | | | |
|---------------------------------------|--------------------------|--|--|---|---------------|---|--|--|--|
| | ERBE-like | ES-4 ERBE-like Geographical Averages | monthly, daily, monthly hourly | 2.5°, 5°, 10° gridded regional and zonally averaged, globally averaged | 1 file/month | 9 | | | |
| | | ES-9 ERBE-like Regional Averages | monthly, daily, monthly hourly instantaneous | 2.5° gridded regional | 1 file/month | 70 | | | |
| Instantaneous Products (not averaged) | | | | | | | | | |
| Level 2 | Clouds and Computed Flux | CRS Clouds and Radiative Swath | instantaneous | instantaneous instrument | 1 file/hour | 85 | | | |
| | Clouds and TOA/SFC Flux | SSF TOA/Surface Fluxes and Clouds | instantaneous | field-of-view | 1 file/hour | 60 | | | |
| | ERBE-like | ES-8 ERBE-like TOA Estimates | instantaneous | (FOV) swaths ² | 1 file/day | 290 | | | |
| Level 1B | N/A | BDS Instrument data | instantaneous | instantaneous instrument field-of-view (FOV) swaths ² | 1 file/day | 640 | | | |

^{1. (}MB) File sizes may vary based on amount of data collected and instrument sampling.

². On TRMM with a satellite altitude of $350~\mathrm{km}$, the optical field-of-view (FOV) at nadir is $10~\mathrm{km}$ resolution.

On Terra and Aqua with a satellite altitude of 705 km, the optical FOV at nadir is 20 km resolution.

On NPP with a satellite altitude of 824 km, the optical FOV at nadir is 22 km resolution.